

To Sabrina Forrest/EPR/R8/USEPA/US@EPA

cc Michael Holmes/EPR/R8/USEPA/US@EPA

bcc

Subject Re: Fw: CC48 and Gladstone treatment

Sabrian - Bill's explanation indicates that:

- 1. The State and SGC were unable to predict the water level elevations that would result from the installation of the first plug.
- 2. Bill acknowledges that ground water may not reach "equilibrium" for many years and that the water levels are affected by high and low precip /recharge years.
- 3. Equilibrium means: water levels (head) do not change with time. Steady state means: the magnitude and direction of flow velocity are constant with time.
- 4. It is pretty clear that neither equilibrium nor steady state flow occurs in the mine poll /ground-water system in upper Cement Creek. It is also unclear as to what method / technique the State and /or SGC used to predict the equilibrium water levels that would result after plugging.

mike Sabrina Forrest/EPR/R8/USEPA/US



Sabrina Forrest/EPR/R8/USEPA/US 11/14/2005 04:05 PM

To Mike Wireman/EPR/R8/USEPA/US@EPA, Michael Holmes/EPR/R8/USEPA/US@EPA

CO

Subject Fw: CC48 and Gladstone treatment

guess I just don't get it......Bill tried to explain that mine pool equilibrium question again, and well, it's not sinking in. At least there is the point made regarding lack of equilebrium between the American Tunnel and Sunnyside mine - on the Animas side

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---- Forwarded by Sabrina Forrest/EPR/R8/USEPA/US on 11/14/2005 04:02 PM -----



William Simon <wsimon@frontier.net> 11/10/2005 02:49 PM

To Sabrina Forrest/EPR/R8/USEPA/US@EPA

CC

Subject RE: CC48 and Gladstone treatment ...

The mine pool had reached above the predicted level and had been maintained for a long period before SGC was allowed to put in the 2nd bulkhead which by so doing isolated the pressure gauge off on the first bulkhead. The consent decree made this requirement so that they knew equilibrium had been reached. Of course wetter or dryer than normal years changes this somewhat. But equilibrium of the surrounding mountain and the hydrological drawdown cone from + 100 yrs of mining (actually only about 30 yrs. For the American tunnel intercept with the SG mine) likely did not get to equilibrium and it might not for many years.

----Original Message----

From: Forrest.Sabrina@epamail.epa.gov [mailto:Forrest.Sabrina@epamail.epa.gov] Sent: Wednesday, November 09, 2005 9:43 AM

To: William Simon

Subject: Re: CC48 and Gladstone treatment

Bill Thanks and thanks too for pointing out page 16. I still have a question regarding the rationale behind considering the mine pool in equilibrium if we are seeing additional flows in other areas. Can you explain this to me and my simple mind?

ps - I was wrong about the CC18 location too - it is above the Herbert placer ponds and S Fork CC.

pps - Would you like to add Rose and Walsh Smelter to the agenda and invite Willie Tookey to the ARSG meeting? We could discuss our preliminary findings on the Rose and Walsh Smelter data and it would be useful for the ARSG (and County, if they are in attendance) to discuss possible plans or get ideas on how to address issues. I can at least tell folks what has been happening.

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William Simon
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11/07/2005 10:11 PM Sabrina

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cc

То

Subject

CC48 and Gladstone treatment

The moving average graph at CC 48 depicts quite clearly what has happened since the consent decree was completed and SGC stopped treating. Actually Gold King was treating after that for a while, off and on, in 2003 but they were out of compliance even when they were operating apparently due to the change of conditions and addition of Gold King mine waters. Zn concentrations have increased substantially according to the 12 month moving average which tends to smooth things out rather than accentuate them.

Animas long, Page 16, has a time line explanation of events.

Our graphs for CC18 and CC20 only go through 2002 unfortunately but I've requested more recent USGS data and we'll be getting some from the TBA so that will help in the future—we'll add it to what we have and then will do similar to CC48.

Bill

(See attached file: CC48 Charts.xls)(See attached file: Animas Long.doc)